

U.S. NUCLEAR DETERRENCE POLICY: DO WE HAVE IT RIGHT?

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USAWC STRATEGY RESEARCH PROJECT

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ABSTRACT

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The Cold War is over and the Soviet Union is gone. Africa, the South Pacific, and Latin America are nuclear weapon free zones. China is a most favored trading partner. The United States and Russia have dismantled hundreds of nuclear weapons and decommissioned scores of bombers and submarines. There is a myriad of international treaties designed to create a world without threat of nuclear holocaust. So why do states and other actors continue to seek nuclear weapons? Iran is in the media with its thinly veiled efforts to establish itself as a nuclear power. On 6 September 2007, Israel bombed a facility in Syria they believed to be a nuclear threat. North Korea is fattening its international bargaining power with its nuclear program. Pakistan, a nation teetering on the edge of political upheaval, has nuclear missiles. Transnational terrorist organizations relish the thought of acquiring an atomic device. Today's nuclear world is not the one our parent's knew. The purpose of this paper is to assess U.S. nuclear deterrence policy to see how it has evolved and if it is appropriate for today's changed security environment.

U.S. NUCLEAR DETERRENCE POLICY: DO WE HAVE IT RIGHT?

The Peace Dividend?

During the Cold War the United States built an immense nuclear arsenal to deter nuclear war with the Soviet Union; a clear and valid *raison d'être*. The Cold War is over; has been over for more than 10 years. The Soviet Union is gone. Our Armed Forces got a medal for it. Africa, the South Pacific, Outer Space, and Latin America are nuclear weapons free zones. Today, we have the Limited Test Ban Treaty, the Comprehensive Test Ban Treaty, an Outer Space Treaty, the Nuclear Non-Proliferation Treaty (NPT), three Strategic Arms Limitation Treaties, the Intermediate-Range Nuclear Forces Treaty, two Strategic Arms Reduction Treaties, and the Anti-Ballistic Missile (ABM) treaty. The convergent thesis of these and other international agreements is a movement to remove nuclear arsenals from the options list of nation-states. The cornerstone of the movement to create a nuclear weapons free world is the Nuclear Non-Proliferation Treaty. The NPT is a universally recognized agreement among 136 nuclear and non-nuclear nations to prevent the expansion of nuclear weapons to non-nuclear states. The days of living under the cloud of "Mutual Assured Destruction" have passed. So what is the purpose of retaining nuclear weapons in this new environment? Why are we investing tax dollars in new nuclear technology and upgrading our weapons stockpile? Where is the peace dividend?

The main purpose of this paper is to assess U.S. strategy for nuclear deterrence and determine if it is appropriate for application in the post Cold War world. My analysis examines five strategy documents; the *U.S. National Security Strategy*, the *National Military Strategy to Combat Weapons of Mass Destruction*, the *Nuclear Posture Review*

(NPR) submitted to Congress in December 2001, and a July 2007 statement by Secretary of Defense, titled *National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century*. I compare and contrast our strategy with alternative points of view from various sources to answer the following questions:

- What is our nuclear deterrence strategy?
- What are the ends, ways and means of our nuclear deterrence strategy?
- Is the U. S nuclear strategy feasible, acceptable and suitable?
- What are the counterpoints to our nuclear deterrence strategy?
- Does our strategy balance the risk it forces the world and us to assume?

Nuclear Deterrence Strategy

The 2001 Nuclear Posture Review (NPR) underpins U.S. nuclear deterrence strategy and was the first strategy document to address nuclear deterrence in the Post Cold War environment. It was a review of U.S. nuclear policy requested by Congress and authored by the Department of Defense in concert with the Department of Energy. It is an executive strategy document designed to blueprint the future of our nuclear forces and transform the military with consideration given to the post Cold War environment. The NPR takes the President's guidance, considers the security environment (current and future) and establishes defense policy goals (ends), introduces a capability based force structure (means), and introduces a "New Triad" (ways) to accomplish the defense policy goals. Some key points from the President's guidance are that the Cold War approach to deterrence is no longer appropriate and we should encourage Russian cooperation to end our mutually assured destruction (MAD) relationship. Achieving those goals would allow us to lower the number of nuclear

weapons, but in order to maintain our leverage we need to develop and field more capable missile defenses and place greater emphasis on advanced conventional weapons. The NPR is the cornerstone of our nuclear strategy with each of the proceeding national strategy documents following that established path.

It is essential to define the differences between the Cold War environment and the security situation we face today. That difference provides the backdrop for changes in nuclear strategy proposed by the NPR. The Cold War nuclear strategy put its emphasis on deterrence with heavy reliance on threat based offensive nuclear forces. That Cold War deterrence strategy was defined primarily by a bi-polar world with the Soviet Union, as the single peer opponent. There were few contingencies and the end result of a nuclear conflict was the likely destruction of both nations. The outcome of a potential end to humankind actually made our nuclear deterrence strategy a simpler proposition. Today's situation is far more complicated and dictates a different strategy. We now have multiple state and non-state real and potential opponents. We have near-peer opponents in Russia and China that might respond to traditional deterrence strategies. Rogue states like North Korea and Iran are more difficult to predict. There are various terrorist networks and non-state actors that are only predictable in the sense that we know their intent is to inflict as many casualties as possible whenever they gain a capability. A nuclear attack against the United States or our interests abroad by any of these actors could run the entire gamut from a low casualty producing dirty bomb to regional devastation with millions of casualties. Today's environment clearly justifies the new thinking introduced in the NPR.

The 2006 NSS doesn't take anything away from the strategy introduced in the NPR, but adds two new objectives specific to rogue states and terrorists. "The best way to block aspiring nuclear states or nuclear terrorists is to deny them access to the essential ingredient of fissile material." The President admits in his guidance that we cannot take away the knowledge of nuclear technology. It is 60 years old and is widely available. What we can do is control fissile material. The NSS presents two methods for preventing the spread of fissile material. The first objective requires closing a loophole in the Non-Proliferation Treaty that permits regimes to produce fissile material that can be used to make nuclear weapons under cover of a civilian nuclear power program. He proposes an international system where nuclear fuel would be provided to nations desiring nuclear energy. This would negate a non-nuclear state's reason to enrich nuclear fuel and use it for nuclear weapons. The second nuclear proliferation objective is to keep fissile material out of the hands of rogue states and terrorists. To do this the Administration is leading a global effort to reduce and secure fissile material through the Global Threat Reduction Initiative (GTRI) and by building on the success of the 2003 Proliferation Security Initiative (PSI). Each of these is a program to locate, track, and reduce nuclear material in cooperation with other nations. International cooperation offers the best hope for a peaceful, diplomatic resolution to nuclear proliferation. In the interim, we will continue to take all necessary measures to protect our national and economic security. Non-proliferation can ultimately be resolved only if rogue states make the strategic decision to change their policies, open up their political systems, and afford freedom to their people. This is the ultimate goal of U.S. policy.¹

In July 2007 the Department of Defense published a follow-up statement to the NPR and NSS. It was primarily designed to gain support to fund the nuclear force modernization directed in the NPR. It is underscored by a re-justification of the need for nuclear deterrence and maintenance of nuclear stockpiles as defined in the NPR. In order to accomplish the national security goal, to deter aggression against ourselves, our allies, and friends, we need to, "...invest now in the capabilities needed to maintain a credible deterrent..."² The centerpiece of the statement is establishing advocacy for the Reliable Replacement Warhead (RRW) program. The premise of the statement is that if we don't invest in the RRW program the United States cannot "...sustain its strategy of deterrence, meet its security commitment to allies, and pursue further reduction in nuclear weapons without assuming additional risk."³ The reasons for investing in the RRW and maintaining a nuclear capability are consistent with the NPR and the strategy of deterrence. You have to have a credible capability in order to employ it as leverage. The RRW not only makes our threat more credible but also works as a strategic communication tool against our adversaries.

Ends, Ways, and Means

Ends. The NPR introduces four defense policy goals (ends) to our nuclear strategy. Those objectives are first, to assure our friends and allies that the U.S. nuclear capability is a deterrence measure for their security as well as ours. The desire of this goal is to reduce incentives for our non-nuclear allies to acquire nuclear weapons of their own. The credibility and reliability of U.S. nuclear assurances are necessary to keep countries such as South Korea, Taiwan, and Turkey from reconsidering their decisions to be non-nuclear states.⁴ The second goal is to deter aggressors from

attacking the U.S. or our allies with WMD. The third goal is to dissuade competitors from acquiring WMD, and the fourth goal is to defeat our enemies decisively. The 2006 National Military Strategy to Combat WMD (NMS-WMD) gives additional indication as to our nuclear weapons strategy. It states that we may use both conventional and nuclear responses to deter or defeat a WMD threat or subsequent use of WMD. The objective in the NMS-WMD expands the NPR by stating that the Military Strategic Objectives are to Defeat, Deter – Protect, Respond, Recover – Defend, Dissuade, Deny – Reduce, Destroy, and Reverse. It adds goals to respond and recover from attacks and includes objectives to prevent enemies from gaining materials to acquire WMD.

President Bush addressed non-proliferation in his 2006 National Security Strategy with recognition that the new strategic environment requires new approaches to deterrence and defense. He reiterated the concepts originally introduced with the New Triad although in 2006 his objective focused on providing for denial of means to produce WMD, but stated that if necessary he would respond with overwhelming force. He set up his plan for expanding our nuclear capability by saying that safe, credible and reliable nuclear forces continue to play a critical role. This statement set the stage for modernized nuclear capabilities that can be employed against an expanded target list that includes not just enemy nuclear targets but other nations or groups with the potential to build a capability to strike the U.S. with WMD. This is a significant change from the Cold War era where nuclear weapons were the threat based response to a corresponding nuclear attack. His goal is that our increased capability will convince others to forgo a nuclear weapons program and thus aid his nonproliferation objective.⁵ It should be encouraging to those who disagree with our peace through strength policy

that the NSS leads with the statement, “Our strong preference and common practice is to address proliferation concerns through international diplomacy, in concert with key allies and regional partners.”⁶

Ways. The old TRIAD was a strategy of employing nuclear armed bombers, submarines, and land based ballistic missiles to implement deterrence. The New Triad⁷

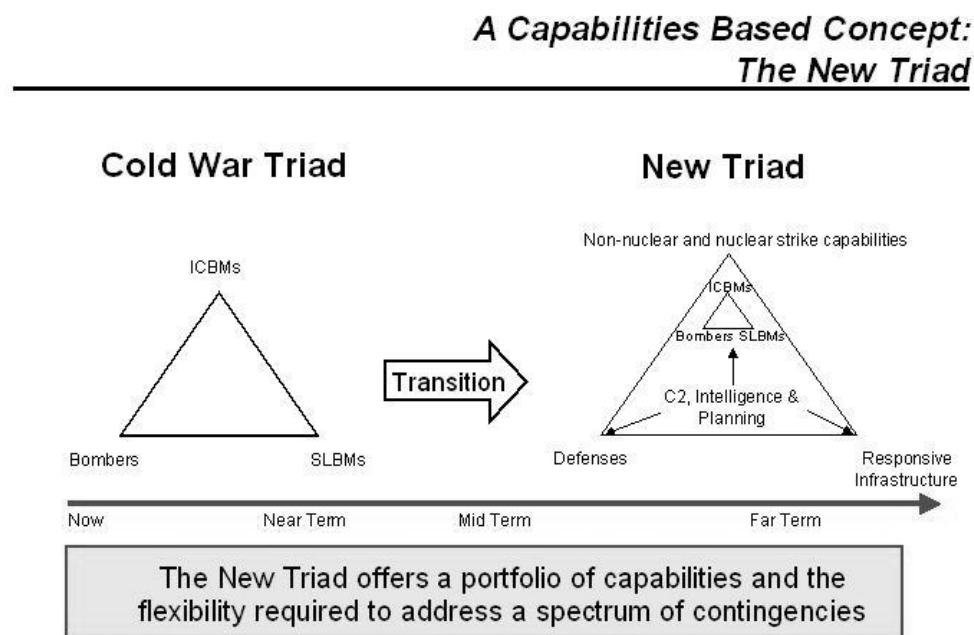


Figure 1: The New TRIAD

is a capability based structure unlike the threat based force structure that was designed to counter the traditional threat we faced during the Cold War. The Department of Defense has taken a more holistic approach in designing capabilities to exercise our nuclear strategy. Those capabilities require a force structure and hence the New Triad was introduced in the NPR. It is composed of offensive strike systems (conventional and nuclear), missile defenses, and a responsive national security infrastructure. The establishment of this New Triad can both reduce our dependence on nuclear weapons

and improve our ability to deter attack in the face of proliferating WMD capabilities.⁸ These new capabilities are not country specific and provide for multiple contingencies. Missile defenses can reduce our dependence on offensive nuclear weapons, thus providing our conventional strike forces as an option to a nuclear strike. Key to making the New Triad work as a system is advanced command and control technology, improved intelligence systems, and new planning methodologies.

Means. The new force must have the ability to respond to the full spectrum of immediate and potential contingencies. In the uncertain world of the 21st century we need operationally deployed forces for immediate and unexpected contingencies, responsive forces for potential contingencies, and preplanned operations for short notice events. Our new strategy allows for reduction of our nuclear forces. The goal of this strategy is to reduce to 1700-2200 operationally deployed warheads by 2012. Some warheads will be downloaded and preserved for potential future contingencies. The U.S. will retire the MX ICBM, remove four of 14 Trident submarines from strategic service, remove the nuclear capability of the B1 bomber, and download warheads from operationally deployed ICBMs and SLBMs.⁹ Introduction of new technology is one of the more controversial elements of the NPR. Low yield and bunker buster nuclear weapons have been introduced in our strategy as a means to combat terrorism. There are also new technologies to make weapons more accurate, and provide capabilities for in-flight command and control to take out mobile and relocatable targets. The last component of new technology is in the area of nuclear force modernization. This includes programs such as the Reliable Replacement Warhead.

Counterpoints to U.S. Nuclear Deterrence Policy

The following paragraphs capture counterpoints to the U.S. strategy of non-proliferation, deterrence, and disarmament.

- The NPR leads to new nuclear capabilities, the possible resumption of nuclear testing, and plans to use nuclear weapons against non-nuclear states believed to have the capability to build weapons of mass destruction.¹⁰ If the U. S threatens non-nuclear states the logical reaction of those states would be to develop nuclear weapons for their own deterrence purposes. This does not lead to non-proliferation.
- Any use of a nuclear weapon would lead to massive civilian casualties, radiation victims, and would constitute a crime against humanity.¹¹
- The U.S. has withdrawn from the Anti-Ballistic Missile Treaty (ABM) and has refused to ratify the Comprehensive Test Ban Treaty. The nuclear strategy indicated in the NPR may give the international community reason to question whether the U.S. is committed to implement other disarmament obligations. This could undermine the credibility of the United States and increase nuclear dangers worldwide.¹²
- When the NPR uses the term, “operationally deployed,” when discussing disarmament it does not account for nuclear weapons retained in a different state of readiness or stored as components nor does it account for approximately 1100 tactical nukes¹³ including 480 tactical nuclear gravity bombs not reduced by the Presidential Nuclear Initiatives of September

1991.¹⁴ The thousands of non-deployed and non-strategic nuclear warheads not addressed pose risk of breakout, theft or unauthorized use.¹⁵

- If the U.S. is not threatened by attack from Russia we should only need a few hundred nuclear weapons to deter threat scenarios involving Russia or any other state.¹⁶
- The continued reliance on and preservation of the U.S. nuclear arsenal is contrary to the 1968 Nuclear Non-Proliferation Treaty (NPT), which obliges nuclear-weapon states to work toward eventual disarmament in exchange for non-nuclear weapons states' commitment to refrain from acquiring nuclear weapons. At the 2000 Review Conference of the Treaty, the U.S. and other nuclear-weapon states pledged to an “unequivocal undertaking to accomplish the total elimination of their nuclear arsenals.” Thus, the U.S. has committed itself to pursue the elimination, not the preservation, of nuclear weapons.¹⁷
- The United States' threat of preemptive strikes against non-nuclear states or transnational terrorist organizations undermines nonproliferation efforts by persuading non-nuclear states that they may need WMD for their protection.¹⁸
- Deterrence can only succeed if there are viable plans for what to do if it doesn't succeed. The threat of nuclear retaliation, preemptive strikes, and nuclear force improvement can be seen as threatening to the rest of the world. “...the assertion...of a need and a right to have a nuclear deterrent may encourage additional countries to assert the same need and right, leading to further nuclear proliferation.”¹⁹ One should consider President

Putin's response to our nuclear capacity building and the emplacement of ballistic missile defenses in Europe.

- A key assertion in the 2007 policy statement is that the U.S. needs to invest in revitalizing its nuclear weapons or be forced to maintain larger stockpiles of nuclear weapons or move to conduct explosive tests for reliability.²⁰ That premise is disputed by a JASON study completed in January 2007 for the Department of Energy that concluded the "pits" or cores of nuclear weapons in the existing U.S. nuclear stockpile will last for 100 years without affecting the reliability of the weapons.²¹ Some technical experts and government consultants have stated that the RRW program is unnecessary and that it's requirement is driven by contractors.²² Stanford physicist and government advisor, Sydney Drell says our nuclear weapons are safe and reliable. He believes that the development of new technology may lead to a resumption of underground nuclear testing.²³
- There are already ongoing upgrades and maintenance programs such as the Stockpile Stewardship Program (SSP), various Life Extension Programs (LEP), and an ongoing program for the Trident submarine launched ballistic missile that is designed to extend their reliability for 30 more years.²⁴ It is not essential that our nuclear weapons be upgraded now.
- A National Academy of Sciences report calls for a program of progressive constraints to reduce U.S. and Russian nuclear arsenals to 1,000 total warheads each and then, if security conditions permit, to a few hundred warheads, provided adequate verification procedures and transparency

measures have been implemented.²⁵ Non-proliferation programs need to be given time to work. It is within the realm of possibility that the established nation-states of the world can be influenced to forego their nuclear weapons capability. Do we need to retain massive modernized nuclear capability to deter non-state actors and terrorists that may construct a single nuclear device and if they did, who and where would we retaliate. Wouldn't our overwhelming conventional strike forces be enough?

- Modernization of our nuclear arsenal blurs the distinction between conventional and non-conventional decision templates and lowers the nuclear threshold.²⁶
- The idea of preventing Iran from acquiring a nuclear capability is all but impossible. Iran is a signatory to the Non-Proliferation Treaty. The NPT authorizes nations to employ nuclear energy for peaceful purposes. Oil reserves in Iran are not bottomless and Iran is a growing industrial nation with increasing energy needs. Nuclear energy is a viable alternative to their impending shortfall. Retired General Abizaid, former Central Command commander, says we should press the international community to pressure Iran to cease its drive to acquire nuclear weapons and that we should not rule out any option we have to "deal with it". He caveated that by adding, "I believe the United States, with our great military power, can contain Iran. Let's face it – we lived with a nuclear Soviet Union, we've lived with a nuclear China..."²⁷

- Is the threat of nuclear retaliation or a nuclear preemptive strike a credible threat given the adversaries we face today?
- It is understandable how some feel that the introduction of new technology in the field of nuclear weapons is contrary to disarmament and diverges from lowering the risk of a nuclear conflict. New technology manifested in a kinetic capability can be interpreted as an expansion of the nuclear weapons target list. Low yield and bunker buster weapons that are proposed in our strategy meet that definition. Low yield weapons may be less harmful but they raise the likelihood of a nuclear response because their low yield marks them as a more risk worthy weapons choice. The same perception applies to nuclear bunker buster weapons; a weapon that explodes under the ground with a lower atomic yield. This concept has obvious merits, the capability to destroy a bunker hiding Osama bin Laden, his deputy Sheik Zawahiri, or a terrorist cell holding a nuclear weapons is quite endearing. The hypothesis is that the U.S. will conduct a thorough risk assessment before elevating a conflict to the nuclear level. The NPR and the NMS-WMD dictates that a nuclear answer may be included in the options for deterring WMD. Each of these technologies expands our target list and increases the potential for nuclear escalation.
- President Bush wants to encourage Russian cooperation in the quest towards disarmament. His NSS directed the United States to seek to work closely with Russia on strategic issues of common interest and to manage issues on which we have differing interests. That end may be elusive given the

demonstrated Russian resistance to missile defenses being established in Eastern Europe. Many in Europe and around the world believe we have antagonized the Russians with this proposal. "We have been put in a situation where we have to react," Putin said of U.S. plans to deploy a missile defense system in Poland and the Czech Republic and build new bases in Romania and Bulgaria.²⁸

Why Do We Still Need to Retain a Nuclear Capability?

Given the preceding counterpoints why do we still need a nuclear arsenal? According to the March 2006 National Security Strategy (NSS); nuclear weapons are needed to deter state and non-state actors, through denial of the objectives of their attacks and, if necessary, respond with overwhelming force. The NSS states, "Safe, credible, and reliable nuclear forces continue to play a critical role..." The December 2003 National Military Strategy to Combat Weapons of Mass Destruction says, "The U.S. will continue to make clear that it reserves the right to respond with overwhelming force – including through resort to all of our options – to the use of WMD against the U.S., our forces abroad, and friends and allies." The 13 February 2006 edition reiterates that offensive operations may include a nuclear option against a myriad of non-nuclear targets to include; "...the capability to defeat hard and deeply buried targets chemical or biological agent and associated weapons and equipment. "

It is apparent, according to the NPR, the President's guidance in the NSS, and the CJCS guidance in his NMS to Combat WMD, that nuclear capabilities may be used to offset more than a nuclear threat. Twelve nations have nuclear weapons, 28 nations have ballistic missiles, 13 nations have biological weapons, and 16 have chemical

weapons. That expanded nuclear employment strategy swells the potential target list. Is growth of our physical target list and the addition of non-nuclear states as a target a move in the opposite direction of disarmament? That brings up the most compelling questions of our nuclear strategy. Are nuclear weapons an appropriate deterrent for non-nuclear events? Are they appropriate for use against non-nuclear states? Are they appropriate for use against transnational terrorist networks that don't control land in which to target? Julian Gable's article, *The Role of U.S. Nuclear Weapons after September 11*, said that today's nuclear players are far more complex than the monolithic ideologue Soviet Union. We should consider the unpredictable future of North Korea, Pakistan, Iran, China, Russia, India, and various transnational terrorist organizations. This new multi-faceted threat appears to validate the U.S. capabilities based strategy.²⁹ The nuclear players in today's world are not only less predictable but they do not always act rational as defined in the Western world. Clausewitz would consider this dilemma "the fog of war." The answers to these questions of appropriateness are as complex as the world we face.

Terrorists are not deterred by nuclear weapons.³⁰ It is inevitable that non-state actors and transnational terrorist networks will become nuclear players. Some terrorist manifestos openly admit that they seek and intend to employ atomic devices or other weapons of mass destruction. The shortfall in our strategy of employing our overwhelming nuclear capability as deterrence to these organizations is that it is difficult if not impossible to identify a target to strike that is of value to the terrorist. The Jihadist organizations have demonstrated a continuing willingness to die for their cause and would likely welcome a nuclear attack against them. Any nuclear strike in the Middle

East would cement many Muslim's belief that the U.S. is in a war against Islam. The international backlash and regional consequences of such a strike would weigh heavy against that course of action.

The "rogue states" of North Korea, Iran, and perhaps Syria, fall into the unpredictable if not irrational category led by powerful leaders with absolute or near dictatorial powers. Effectiveness of nuclear weapons against this type of rogue state is questionable because "...the ultimate sanction for rogue-state leaders is not the use of nuclear weapons against their people, but the regime's removal from power."³¹ Some believe it would be ineffective and immoral to employ nuclear weapons against the populations of these countries. The argument is that if we used atomic weapons against these countries it would not change the totalitarian nature of the leaders. Each of these nations has a strong national identity. We have learned that nations like these, including Iraq, will gather behind their leaders in time of national emergency. Diplomacy is an effective strategy against nations such as these as evidenced by our progress with North Korea, a diplomacy leveraged by Kim Il-Sung's knowledge that he could never employ his nuclear weapons for fear of U.S. overwhelming retaliation that would result in his inevitable defeat.

Near-Peer Competitors are more predictable. Many experts agree that old theories of deterrence still apply both in the Russian and Chinese cases.³² A complicating factor with Russia is that it is only a near-peer competitor on the nuclear stage. It's conventional forces are not on par with NATO forces. That may be a reason why Russia is opposed to the missile defense systems the U.S. proposing for Europe. There is high risk in relegating Russia's nuclear capability to near-impotence or even

irrelevance. A weak conventional force and an ineffective nuclear capability would considerably limit Russia's military options. That threat could make them unpredictable and push them to pursue other strategies in order to retain their stature. Recent events indeed have stirred Russia in a direction that is contrary to what we thought our nuclear strategy would do. President Putin said he sees a "new turn in the arms race" in which "well-developed countries" invest more to produce better weapons than those in Russia. Putin promised that balance would soon shift. "In the near future, we will develop new weapons that have the same characteristics, and in some cases better characteristics, as those being built by other countries." ³³ Circumstances that would put China at nuclear odds with the U.S. are sparse. The United States is China's largest consumer of their exports and they own a significant portion of our national debt. It is clearly in their best interest to compete with us on the economic front and not the nuclear one. Diplomacy and continued efforts to disarm are a better strategy than trying to muscle them into compliance.

Uncertainty is a weighty reason for maintaining our nuclear arsenals. History is the greatest indicator of the fact that you never know what will happen in the future. India and Pakistan may jump out of future history pages considering the dynamics of that region. Both nations are nuclear powers. Pakistan is teetering on regime change to what may be a radical theocracy supportive of the Taliban and Al Qaeda. Will the U.S. use nuclear weapons to defend Taiwan? Will the U.S. conduct preemptive strikes in Syria or Iran to keep them from becoming a nuclear power? That may not be necessary as long as Israel continues its demonstrated policy of preemptive strikes. Is there potential that Venezuela may seek to attain nuclear weapons? Chinese nuclear

force modernization efforts could increase motivations for acquisition of nuclear weapons by Japan, Taiwan, South Korea, and perhaps Indonesia. Tensions in the region may also directly increase India's motivations to expand its nuclear arsenal, creating incentives for Pakistan to take similar steps.³⁴ Is that enough uncertainty to retain, maintain, and upgrade our nuclear capability?

Some have argued that the U.S. is expanding the potential for escalation to nuclear warfare. The NPR, the NSS, and NMD-WMD resolve that argument. The U.S. has openly stated that they may use nuclear weapons against non-nuclear targets, they may use nuclear weapons against non-nuclear states, and they may use them against terrorists with the potential to use WMD. Each of those situations presents a compelling argument for the appropriateness for employment of our nuclear capability. These are circumstances where the cost of nuclear weapons employment may justify the benefit. U.S. strategy is an expansion of potential.

Feasible, Acceptable, and Suitable

The assessment of our nuclear deterrence strategy is best guided by the Strategy Formulation Model developed and taught at the U.S. Army War College. (See *diagram*.) Each of the strategy documents reviewed in this research project represented our national purpose/interests and was guided by the President's strategic vision, as indicated at the top of the diagram. I identified and discussed the ends, ways and means for our national strategy. The next stop in the assessment of our strategy to apply the Feasibility, Acceptability, and Suitability test (FAS).

Feasibility. The question to resolve is, "Can the strategy be accomplished with the available resources." Do we have the budget, technicians, and technology? The

answer to the budget question depends on who you ask. Some would say that as long as we can pay the interest on the national debt we can borrow until the cows come home. Others would say that the ongoing Global War on Terror, the looming budgetary crisis in entitlement programs, and our burgeoning trade deficit demands that we tighten our fiscal belts. The truth is only known after it happens and even that is up for interpretation. Our strategy is feasible.



Figure 2: Strategy Formulation Model

Acceptability. Is this strategy worth the cost in terms of political/social acceptability? Is it consistent with the law of war? The fact is that there has been no public outcry in the seven years since our policies were published in the NPR. There is

a loosely organized niche of academics and scientists that represent a range of opposition from total disarmament to a push for informed dialogue on the policy. This has been a seriously neglected issue in the ongoing race for the White House. There is no motivation to substantially revise the current U.S. nuclear posture.³⁵ It's simply not a significant issue with the general public and logically does not interpret into a political issue. As far as the law of war goes, we are not in violation of the NPR. As a nuclear state we are obliged only to negotiate in good faith for the eventual elimination of all nuclear weapons. The U.S. is working towards that goal. In May 2003, George Bush spoke to our participation in the Proliferation Security Initiative (PSI). This is political commitment by the U.S. to interdict WMD.³⁶ Preventive or preemptive strikes against threats to our security are by definition legal. The United States is not obliged to absorb the first strike before it is authorized to retaliate.³⁷ Our strategy is acceptable.

Suitability. Will the strategy reasonably accomplish the objective? Evidence of suitability is a little more fleeting. Our Cold War nuclear strategy dealt in theory. Some believe our theory was proven out by our victory in the Cold War. Relating this victory to our strategy is more complex in that it is difficult to prove a negative. In other words can we relate our success in the Cold War to an event that didn't occur and assume cause and effect? The same situation weighs on our strategy today. We won't know if deterrence through strength will work until nothing happens. It is a reasonable assumption that nuclear weapons have not been employed to date because of the strong deterrent provided by the U.S. and its allies.

Risk Assessment

Strategic concepts introduced in the NPR require a strict risk assessment no different than that required of our nuclear strategy for the previous 50 years. The main point in the 2007 DoD statement is that the U.S. (and the world) assume risk if the reliable replacement warhead is not funded. We need to have a credible nuclear capability to leverage our policy and balance risk as we pursue the strategy detailed in the NPR and NSS. We have already seen a defiant Iran promise to pursue nuclear capability. Russia has asserted they will not stand idle as the U.S. continues to expand and solidify its position as the world's only nuclear superpower. We know that transnational Jihadist terrorists will continue their pursuit of WMD regardless of our policy. A potential risk is that we may push Russia into an arms race. Iran and the terrorist organizations won't change regardless of our policy. Diplomatic agreements to disarm do not guarantee that adversaries won't covertly continue to develop WMD.

What could occur that would indicate our policy is flawed? A likely policy spoiler could be a WMD event that doesn't even strike the United States. The effectiveness of our deterrence policy would be in serious question if Syria or Iran attacked Israel with a nuclear device. What if Saudi Arabia decides it needs nuclear weapons to offset Iran's growing capability and Syria does the same to offset Israel's? Each envisioned situation could require a preemptive or reactive nuclear response based on our policy. Our best risk mitigators are diplomatic measures, continued participation in disarmament treaties and negotiations, our advanced conventional strike capabilities, and our nuclear force.

There are three general strategies we could pursue on the nuclear front. We could continue with the current strategy, we could do nothing and keep what we have, or we could try expanded disarmament and see if the world takes our lead and follows

suit. What if we do nothing? Will other nations develop technology that will make our nuclear force irrelevant? Not likely in the foreseeable future. Our nuclear capability will remain the preeminent force for some time to come. There is some concern that our technical ability for nuclear weapons testing and design will atrophy because scientists and technicians will gravitate to other fields. This could cost us the ability to rapidly reestablish a program if future events require it.³⁸ All would agree we assume risk if we do nothing and hope we never need to use our nuclear capability. Are we willing to lay down our arms and assume the risk that no one will strike us when we are not looking? I think not? Our current strategy is a balanced risk.

Conclusion

U.S. strategy documents such as the NSS and NPR introduce a nuclear strategy devised to counter threats we face in the 21st century. Our strategy pledges to assure allies and friends, deter aggressors, dissuade competitors, and defeat enemies. It replaces the old threat based nuclear triad with a capabilities based triad that includes nuclear and non-nuclear solutions. We continue a program of downsizing nuclear stockpiles as enabled by new technology in weapons, command and control improvements, and advanced planning tools. The new strategy still uses our position as the preeminent nuclear force to enable our deterrence policy from a position of strength. This new strategy opens the door to complaints that we are moving away from disarmament and may be encouraging others to develop a nuclear capability. The U.S. nuclear strategy is a feasible, acceptable, and suitable solution to WMD deterrence. The bottom line on risk assessment is answered in the question, "How many scenarios do you need to justify retaining a nuclear weapons deterrence capability?" Although few

scenarios exist where the risk of employing nuclear weapons outweighs the benefit; you only need one scenario to justify retaining a nuclear capability. Diplomacy alone is not effective as diplomacy from a position of strength against terrorist organizations, non-state actors, or against today's near-peer threats. The prudent strategist knows that comprehensive nuclear disarmament can only occur where it would enhance the security of the United States and the rest of the world.³⁹ That does not negate the need for continued actions by the United States and Russia to reduce their nuclear arsenals and use their leadership to strengthen efforts towards global nonproliferation.⁴⁰ In the end, the world will never be free of nuclear weapons; the knowledge cannot be negotiated away. The United States has taken the lead to make the world safer through a risk balanced, feasible, suitable, and acceptable nuclear deterrence strategy.

Endnotes

¹ George W. Bush, *National Security Strategy*, (Washington, D.C.: The White House, March 2006), pg 19.

² Donald Rumsfeld, *National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century*, (Washington, D.C.: U.S. Department of Defense, 2007).

³ Ibid

⁴ Steering Committee for the Project on Eliminating Weapons of Mass Destruction, *An Evolving U.S. Nuclear Posture* (Washington, D.C.: Henry L. Stimson Center, December 1995), reprinted in *The Washington Quarterly* 20, no. 3 (Summer 1997): 163–166; Campbell, Einhorn, and Reiss, *The Nuclear Tipping Point*. See Mitchell Reiss, *Bridled Ambition: Why Countries Constrain Their Nuclear Capabilities* (Washington, D.C.: Woodrow Wilson Center Special Studies, 1995); Mitchell Reiss, *Without the Bomb: The Politics of Nuclear Nonproliferation* (New York: Columbia University Press, 1988).

⁵ George W. Bush, *National Security Strategy*, (Washington, D.C.: The White House, March 2006), pg 22.

⁶ Ibid., 28.

⁷ Donald H. Rumsfeld, *National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century*, (Washington, D.C.: U.S. Department of Defense, 2007).

⁸ Donald H. Rumsfeld, "Nuclear Posture Review [Excerpts]," 8 January 2002, available from <http://www.global security.org/wmd/library/policy/dod/npr.htm>; accessed 7 September 2007.

⁹ J. D. Crouch, "Findings of the Nuclear Posture Review", January 9, 2002, briefing slides with scripted commentary, available on <http://www.globalsecurity.org/wmd/library/ news/usa/ 2002/us-20109-dod01.htm>.

¹⁰ *Nuclear Posture Review: what it says...and what it means*, Nuclear Reduction/Disarmament Initiative, The Churches' Center for Theology and Public Policy, 4500 Massachusetts Avenue, N.W., Washington, D.C. (pg1)

¹¹ Ibid.

¹² Ibid.

¹³ Daryl Kimball, "The Presidential Nuclear Initiatives (PNIs) on Tactical Nuclear Weapons At a Glance," March 2006, available from www.armscontrol.org/factsheets/ pnigance.asp, accessed 17 September 2007.

¹⁴ Ibid

¹⁵ "The Future of U.S. Nuclear Weapons Policy, Executive Summary of the National Academy of Sciences Report," May 1997, available from www.armscontrol.org/act/1997_05/ nas.asp; accessed 8 October 2007.

¹⁶ "Nuclear Posture Review Fact Sheet," available from www.nrdi.org/nuclear/ FinalNPR.htm; accessed 2 October 2007

¹⁷ Ibid.

¹⁸ "U.S. Nuclear Policy: Negative Security Assurances," March 2002, available from www.armscontrol.org/factsheets/negsec.asp; accessed 17 September 2007

¹⁹ "The Future of U.S. Nuclear Weapons Policy, Executive Summary of the National Academy of Sciences report", May 1997, available from www.armscontrol.org/act/1997_05/ nas.asp; accessed 17 September 2007

²⁰ James Doyle, "U.S. National Security and Nuclear Weapons in the 21st Century," 23 August 2007, available from www.carnegieendowment.org/ publications/ index.cfm?fa= view&id=19530&prog=zgp&proj=znpp; accessed 17 September 2007.

²¹ *JASON Study, Pit Lifetime*, study number 13069022, commissioned by the Department of Energy to the Mitre Corporation, January 2007. (JASON is an independent scientific advisory group that provides consulting services to the U.S. government on matters of defense science and technology.)

²² John Fleck, "Bomb Designer Questions U.S. Nuclear Policy," *Albuquerque Journal*, March 13, 2006

²³ Ian Hoffman, "Weapons adviser supports nuke plan, Former lab director fears U.S. nuclear arsenal may see defects," *The Oakland Tribune*, March 13, 2006

²⁴ Doyle, 1.

²⁵ "The Future of U.S. Nuclear Weapons Policy, Executive Summary of the National Academy of Sciences report", May 1997, available from www.armscontrol.org/act/1997_05/nas.asp; accessed 17 September 2007

²⁶ Kaveh L. Afrasiabi, US Lacks Smart Nuclear Policy, *Asia Times Online Ltd.* November 2007

²⁷ John Abizaid, "Retired General: U.S. Can Live with a Nuclear Iran," statement to Washington think tank, September 18, 2007, available from www.cnn.com/2007/WORLD/europe/09/18/france.iran/index.html; accessed 27 September 2007

²⁸ "Putin: Russia will counter U.S. military moves," 8 February 2008, available from www.cnn.com/2008/WORLD/europe/02/08/putin.russia/index.html; accessed 12 February 2008

²⁹ Josiane Gabel (2005). The role of U.S. nuclear weapons after September 11. *The Washington Quarterly*, 28(1), 181-195. Retrieved September 16, 2007, from Research Library database. (Document ID: 758566121)

³⁰ Doyle, 1.

³¹ Michele A. Flournoy and Clark A. Murdock, *Strengthening the Nuclear Deterrent* (Washington, D. C.: CSIS, 2002), p. 30.

³² Gabel. 1.

³³ "Putin: Russia will counter U.S. military moves," 8 February 2008, available from www.cnn.com/2008/WORLD/europe/02/08/putin.russia/index.html; accessed 12 February 2008

³⁴ Doyle. 1.

³⁵ Kaveh L. Afrasiabi, US Lacks a Smart Nuclear Policy, *Asia Times Online Ltd*, 13 November 2007

³⁶ Peter Pace, *National Military Strategy to Combat Weapons of Mass Destruction*, 13 February 2006, (Washington, D.C. Chairman of the Joint Chiefs of Staff), pg 23.

³⁷ Colin S. Gray, *The Implications of Preemptive and Preventive War Doctrines: A Reconsideration* (Carlisle: Strategic Studies institute, USAWC, 2007).

³⁸ Donald H. Rumsfeld, *National Security and Nuclear Weapons: Maintaining Deterrence in the 21st Century*, (Washington, D.C.: U.S. Department of Defense, 2007).

³⁹ "The Future of U.S. Nuclear Weapons Policy, Executive Summary of the National Academy of Sciences Report," May 1997, available from www.armscontrol.org/act/1997_05/nas.asp; accessed 17 September 2007

⁴⁰ Ibid